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ABSTRACT

A study examined alternative instructional materials and strategies for learning disabled college students and strategies for locating and mainstreaming these students. Site visits were made to programs for learning-disabled college students in the Houston, Texas, area to determine their scope and the strategies that they used. Additional information was collected from members of the Western College Reading and Language Association and from college and high school programs throughout Texas. Tape recorders, tape-recorded textbooks, calculators, typewriters, and computers with sound capabilities appeared to be the most commonly used and were effective alternative instructional materials. Notetakers, alternative testing procedures, and tutoring programs were determined to be the most effective strategies for aiding learning-disabled students. In the second phase of the project, 10 students were selected for a special 6-week study skills class and for additional group and individual counseling concerning their future college and life goals. They also received instruction in compensatory techniques and coping skills for college. (Appendixes include a chart of services offered by the responding colleges, a brochure on learning disabilities with suggestions for working with learning-disabled college students, a list of selected organizations and resources, checklists on learning disabled students, a newspaper article on learning disabilities, learning style preference forms, guidelines for college survival skills, handouts compiled for the workshop, and a list of publishers of Apple II GS software.) (MN)

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ALTERNATIVE INSTRUCTIONAL MATERIALS FOR THE LEARNING DISABLED

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ALTERNATIVE INSTRUCTIONAL MATERIALS FOR THE LEARNING DISABLED

Series PVEP-1040 / AH 500
Model Programs for Special Populations

COORDINATING BOARD
POSTSECONDARY VOCATIONAL EDUCATION

Funded by The Carl Perkins Act

Prepared by

Sharon Freeman - Project Director

San Jacinto College - Central

July 24, 1987

APPENDICES

A. Chart of services offered by responding colleges

B. Brochure

C. Selected organizations and resources

D. Check lists on learning disabled students

E. Newspaper article

F. Learning style preference forms

G. Guidelines for college survival skills

H. Handouts compiled for workshop

I. Publishers of Apple II GS Software

Foreword

"The person with severe learning disabilities suffers a malfunction or dysfunction of incoming channels or output channels. He is a person with normal or potentially normal intelligence who has disabilities of a perceptual, conceptual or coordinative nature."

"We can wait 50 years for the neurologists and psychologists to tell us why. But what is more important to those of us who are teachers is to teach these students as much as we can teach, with the best materials and -- more important -- as much as they can learn."

Dr. Jeanne McCarthy
Learning Disabled Specialist

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This research was made possible because of so many invaluable and informative contributors who shared their expertise and knowledge but are not mentioned. People from everywhere are recognizing the dilemma faced by the learning disabled student and are seeking solutions to the problems of helping them become successful in college.

Some people who were especially supportive and helpful were Dr. Clayton Kelley, Ella Parker, Joan Dulle, and Arnold Berrea of the Pasadena, Texas Rehabilitation Commission. My staff, who were very dedicated and conscientious in compiling the research were:

Judy Hawn
Elizabeth Wood
Mike Massingill
Robin Frierson

PURPOSE OF THE GRANT AND RESEARCH METHODS

The main purpose and goal of this Model Program Grant PVEP 1040-AH500 was to research alternative instructional materials and strategies for the learning disabled college student and to find ways of locating and mainstreaming these students. The first step toward accomplishment of this goal was to establish a base of operation with the necessary personnel, determine what equipment; computers, software and tests, were needed, then order the necessary equipment and supplies. Various library sources were utilized immediately with books and periodicals researched to determine sources of information. This aided in the creation of a list of model programs and agencies who work with learning disabled students, such as the Association for Children and Adults with Learning Disabilities (ACLD), the Neuhaus Society, Meyers Institute, HEATH, AHSSPPE, and the Orton Society. A complete list of sources is in Appendix C.

Numerous personal visits and telephone calls were made to determine the scope of area programs and what strategies are being utilized for the learning disabled adults in the Houston area.

Research was then begun on programs in other areas of the country. The research was begun by the program coordinator attending the national Convention of ACLD, which was attended by more than 5,000 people, with representatives from the majority of colleges which have outstanding programs for the learning disabled. Many professionals and authorities from all areas were present who shared information which added to the research findings in this report.

Others who contributed greatly were contacts made through attendance at the Western College Reading and Language Association. These contacts included outstanding professionals in the areas of reading, developmental studies and coordinators for the learning disabled college student. The majority of

these contacts were from west of the Mississippi and were primarily representatives of community colleges. Seventy-five questionnaires on learning disabled programs were disseminated with about half being completed and returned.

Additional research was conducted within this state to determine what strategies and materials are being used in colleges and special programs in Texas. This was accomplished by means of letters, telephone surveys, personal visits and telephone follow-ups. A total of 500 letters were mailed with 139 replies received. Telephone surveys included 100 high schools and colleges. A listing of the colleges and high schools, copies of the letters mailed and the telephone survey used are available by request. This information was compiled in notebook form for future reference and a computer database was created. Thank you letters were sent to the respondents. Notable programs in Texas are at Richland College in Dallas, East Texas State University in Commerce, North Texas State University and Shriners College. In other areas of the United States, learning disabled programs of note are at the University of Southern Illinois, Barat College, University of Virginia, University of Southern California, Chemecketa Community College in Washington, and the Child Service Demonstration Center in Oklahoma. The programs of some of these colleges are much more extensive than others, but they are all similar and have administration and additional grant support.

THE EFFECTS OF PUBLIC LAW 94-154/504

Since the mid 1970s, when many of the services for disabled students were initiated, many changes have occurred in our colleges. Some changes were brought about by passage of the Rehabilitation Act of 1973, and Public Law 94-142 of 1975. Section 504 of this law which directly affects colleges, states that:

> "No otherwise qualified handicapped individual . . . shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance." (Federal Register, Vol. 42, May 4, 1977).

This law changed colleges and altered the lives of thousands of learning disabled individuals who now could have a chance to succeed in college. The American Council on Education reports that from 1978 to 1985, the percentage of learning disabled college students that were located and identified rose from 2.7% to 7.7%. Previously, before the law, large numbers of students did not declare a learning disability or handicap. Data collected in 1982 showed that 5.4% of all freshmen entering college were disabled, and of this group 6% were learning disabled. In 1981, P. M. Fielding claimed that there were 16 million adults with learning disabilities who were potential college students. It is said that this is the largest pool of under-educated and under-employed but high potential persons in our nation. A survey conducted by White, Alley, Deschler and Schumaker in 1982, reported that 67% of young adults diagnosed as learning disabled while in high school planned to attend college.

The total number of students in all schools in 1986 who were identified as learning disabled was 1,866,669. This is a large number of students, many of whom will need special assistance in college or in other specialized training. (Scheber & Talbert, Unlocking Potential, 1986). Locating and assisting this group would expand our dwindling traditional student population in colleges and also be of service to society.

A DEFINITION OF LEARNING DISABILITIES

One problem of locating and identifying learning disabled college students is that there is no standardized definition of

a learning disability. This situation has contributed to the misunderstanding of the term learning disability, which has caused many colleges and agencies to have either poorly formulated plans of identifying and helping the learning disabled or no plan at all. (Zwerlein, Smith & Diffley, 1984).

In addition, the primary emphasis since the identification and recognition of learning disabilities as a handicap has been on assisting children. Until very recently, the adult who is learning disabled has been totally overlooked.

The learning disabled fall into the category described as a hidden handicap. Since there is much misunderstanding, many are ashamed to admit this handicap. They prefer to say that they forgot their glasses or that they have a vision problem rather than admit that they can't read or write. It is easier to define what a learning disability is not than what it is. A learning disability is not an obvious problem such as one of vision, hearing, lack of mobility, the loss of a limb or emotional problems. This insidious handicap varies in severity between individuals and is manifested in many different ways. This group is too bright to be considered slow or retarded, and they are not emotionally disturbed. They simply exhibit a major discrepancy in one or more of the areas of language, reading or mathematics. Most of these individuals also have difficulty in receiving information, comprehending it, understanding it or expressing information meaningfully.

LOCATING AND IDENTIFYING LEARNING DISABLED STUDENTS

Partly because of PL 94-142, many institutions are developing methods of identifying learning disabled students. In 1983, Knowles found that by using ACT scores, the reading section of the Stanford Test of Academic Skills (TASK), and the high school grade point average of incoming college freshmen, learning disabled students could be identified with 84% accuracy. (Mangrum and Strichart, 1984).

A large number of colleges have appointed a special coordinator to locate, recruit and assist learning disabled students. On most campuses, this person has many responsibilities. Some of these responsibilities are:

1. Help recruit students from high schools and from the community.
2. Counsel and assist learning disabled students and serve as advocates.
3. Act as a liaison between the student and faculty.
4. Develop and teach special courses which help learning disabled students.
5. Supervise staff members who assist with letters, phone calls and record keeping.
6. Help with the selection and training of tutors.
7. Speak to high schools and community groups on services which are available.
8. Coordinate and help administer testing.
9. Serve as a parental liaison.
10. Set up an identification process during registration.

Special Registration Procedures

Several identification processes have been used during registration by the learning disabled coordinator. One of these is a special station manned by a teacher who has students fill out a form that explains the services offered by the college. This procedure is a variation of processes that have been effectively used in Texas at College of the Mainland, Richland College, Southwest Texas State University and East Texas State University. A screening form could be used to help further identify this group. Another part of the process involves check lists. These lists have been helpful in locating and classifying learning disabled adults both in college and through rehabilitative agencies. An example of useful check lists used to assist in identifying the learning disabled student are in Appendix D.

Screening Procedures

Once they are located, the learning disabled students should be screened to determine what special assistance would best fit their needs. The initial screening should be conducted by a person who will be perceived as a friend who is sensitive; but has the ability to obtain specific information. Necessary facts could include educational history, family history, a brief medical history, plus academic strengths and weaknesses. Screening methods will vary according to the size of the program and the amount of assistance available to the program coordinator.

To further assist in the screening process, students should be asked to provide copies of their earlier records from either high school or Texas Rehabilitation. These records would give additional insight into their learning problems. This information would be added to their counseling folders and become part of their informal assessment.

Test Descriptions

After the preliminary screening, the students should be tested to determine their strengths and weaknesses, their intelligence and achievements. Many schools have a special diagnostician and some have a testing center where tests are administered. Others have special staff to assist the learning coordinator with testing interpretation and the development of a plan. Due to the number of tests needed for proper diagnosis, this is a very time-consuming process. There is no one test that is adequate. There are many tests already on the market with new ones being developed. Some of the frequently-used tests are:

*Woodcock-Johnson Psycho-Educational Battery (WJPEB)

Authors: Richard W. Woodcock and M. Bonner Johnson.

Publisher: Teaching Resources Corporation, 50 Pond Park Road, Hingham, Massachusetts 02043.

Year of Publication: 1977.

Abilities and Skills Tested: Cognitive abilities, scholastic aptitude, academic achievement, and scholastic and non-scholastic interests.

Age or grade range of norms: Age 3 to 80 and older.

Testing time: 2 hours, 30 minutes to 3 hours.

Description: The Woodcock-Johnson Psycho-Educational Battery (WJPEB) consists of a series of cognitive, achievement, and interest subtests.

Detroit Tests of Learning Aptitude

Authors: Harry J. Baker and Bernice Leland

Publisher: PRO-ED, 5341 Industrial Oaks Boulevard, Austin, TX 78735. Originally published by Bobbs-Merrill Company, Inc., 4300 W. 62nd Street, Indianapolis, Indiana 46206.)

Year of Publication: Examiner's Handbook revised in 1967.

Abilities and skills tested: Reasoning and comprehension, practical judgment, verbal ability, time and space relationships, number ability, auditory attentive ability, visual attentive ability, and motor ability.

Age or grade range of norms: 3 to 19 years.

Testing time: 60 to 75 minutes (based on administering 9 to 13 subtests).

Description: The Detroit Tests of Learning Aptitude (Detroit) contains 19 subtests measuring various aspects of intellectual functioning. The authors of the test recommend that from 9 to 13 tests be administered based on those abilities that the examiner is most interested in. A mental age score is obtained for each subtest. By dividing the median mental age score by the subject's chronological age, a ratio IQ is obtained.

Some of the Detroit Subtests may be used only with young children. Subtests appropriate for older

individuals are used with learning disabled college students.

Wechsler Adult Intelligence Scale -- Revised (WAIS-R)

Author: David Wechsler.

Publisher: The Psychological Corporation, 757 Third Avenue, New York, NY 10017.

Year of Publication: 1981

Abilities and skills tested: General mental abilities

Age or grade range of norms: 16 to 75 years

Testing time: 60 to 90 minutes

Description: The WAIS--R is composed of 11 subtests, 6 verbal and 5 nonverbal. The verbal subtests yield a Verbal IQ and the nonverbal subtests yield a Performance IQ. Administration of the total test yields a Full Scale IQ.

*Slosson Intelligence Test (Second Edition)

Author: Richard L. Slosson

Publisher: Slosson Educational Publications, Inc., P.O. Box 2801, East Aurora, New York 14052

Year of Publication: 1981

Abilities and skills tested: General mental ability
Age or grade range of norms: Young nursery school children to older adults

Testing time: 15 to 30 minutes

Description: The Slosson Intelligence Test consists of a series of short-answer questions. No reading or writing is required of the subject.

Peabody Individual Achievement Test (PIAT)

Authors: Lloyd M. Dunn & Frederick C. Markwardt Jr.

Publisher: American Guidance Service, Inc., Publisher's Building, Circle Pines, Minnesota 55014

Year of Publication: 1970

Abilities and skills tested: Mathematics, reading, spelling, and general achievement

Age or grade range of norms: Grades K through 12

Testing time: 30 to 40 minutes

Description: The PIAT consists of five subtests. No writing is involved. A subject's performance may be interpreted on the basis of either grade scores or age scores.

*Wide Range Achievement Test (WRAT)

Authors: J. F. Jastak, S. R. Jastak, and S. W. Bijou

Publisher: Jastak Associates, Inc., 1526 Gilpin Avenue, Wilmington, Delaware 19806

Year of Publication: 1978

Abilities and skills tested: Reading, spelling, and arithmetic.

Age or grade range of norms: 5 years to adult

Testing time: 20 to 30 Minutes

Description: The WRAT is divided into two levels. Level I is designed for use with children between the ages of 5 and 12. Level II is intended for use with persons from age 12 to adulthood. Scores are interpreted on the basis of grade levels. For subjects ages 18 and 19 (the most likely age of the learning disabled college student who will be tested), the highest obtainable grade equivalents are: Reading 13.7, spelling 13.1, Arithmetic 16.8.

*Gray Oral Reading Tests

Author: William S. Gray

Publisher: Bobbs-Merrill Company, Inc., 4300 West 62nd Street, Indianapolis, Indiana 46206

Year of Publication: 1967

Abilities and skills tested: Oral reading

Age or grade range of norms: Grade 1 to college

Testing Time: 15 to 20 minutes

Description: The Gray Oral Reading Tests consist of four equivalent forms, each of which require a subject to read passages aloud. Each passage is timed, and is followed by four comprehension questions that are read to the student and answered orally. The passages cover the range from pre-primer to adult reading. They become increasingly more complex on the basis of use of higher-level vocabulary, longer words, longer and more complex sentences, and higher-level concepts.

The Gray Oral Reading Test yields grade equivalents. The subject's speed of reading is an important determinant in the grade equivalent obtained. The test measures both accuracy and speed of reading. The examiner records the errors that a subject makes. These are coded into eight categories.

KeyMath Diagnostic Arithmetic Test (KeyMath)

Authors: Austin J. Connolly, William Nachtman, and E. Milo Pritchett

Publisher: American Guidance Service, Inc., Publisher's Building, Circle Pines, Minnesota 55014

Year of Publication: 1971

Abilities and skills tested: Variety of mathematics skills

Age or grade range of norms: Preschool to grade 8

Testing time: 30 to 45 minutes

Description: The KeyMath consists of 14 untimed subtests grouped into 3 major areas. Subtests in the Content area measure basic mathematic concepts and knowledge essential to an understanding and practical application of the number system. Subtests in the Operation area measure basic computational processes. Subtests in the Application area measure the subject's functional use of mathematics. (College and the Learning Disabled Student, Mangrum and Strichart, 1984, Grune & Stratton, Inc. pp. 58-73)

* The tests selected for this specific project are indicated by asterisks.

PROCEDURES FOR PROCESSING STUDENTS FOR A PILOT PROJECT

In addition to researching the materials and strategies used in other programs, another purpose of the grant was to locate prospective students with learning disabilities. The students were located through school referrals, contacts with Texas Rehabilitation Commission and through area high schools. After successful programs of other colleges had been researched, an article was published in the college newspaper and local newspapers stating that a pilot program was beginning at San Jacinto College (Appendix E). Those who were interested in receiving help to attend college were asked to contact the coordinator of the learning disabled project. From this article which ran only one time in four newspapers, there were more than 66 responses. The majority of the respondents were seniors in high school or adults up to their mid 30's who were unemployed or under-employed and who needed and desired college or specialized training in order to obtain better jobs. However, because of their various learning problems and previous failures, had good attitudes and thought that with help they could improve. Since this was a limited short-term pilot project, many very qualified potential students were not involved in the program. Hopefully the college can provide assistance for them at a later date. Some of these persons work during the day and needed testing, counseling and special classes at night. Others had multiple handicaps and needed more assistance than could be provided in this time span.

Of the 66 prospective applicants, twenty were tested, using some of the more accepted test instruments. They were also given additional counseling. This entire process is time consuming but very essential. A cut off score of 85 on the intelligence quotient was established, with the WRAT and Slosson Tests used as assessment measures. This corresponds to

the guidelines of the Texas Rehabilitation Commission. Some students who were tested fell below this level and were not classified as learning disabled. Others were eliminated because of other complications. They were sent letters suggesting enrollment in developmental classes and other courses that could help them. In addition, we would keep their name on a list for possible future programs. All were referred to the Texas Rehabilitation Commission for additional assistance and many of these students were accepted by this agency. This increased TRC's services offered and their case load, created a much better rapport between San Jacinto College and rehabilitation. It also stimulated and increased awareness of learning problems among the rehabilitation counselors.

Ten students were selected for a special six-weeks study skills class and to receive additional group and individual counseling. The students were given a learning style inventory, College Survival Skills handout. (Appendices F and G). They were also given an occupational interest inventory and their objectives were discussed. A plan was devised for next semester and a tentative plan was discussed for future college work and goals in life. These students learned better compensatory techniques and coping skills for college.

ALTERNATIVE MATERIALS AND STRATEGIES

"Learning disabled individuals have the potential to succeed if taught in their strongest learning modality. The successful learning disabled employee has learned to compensate for his deficits by using his related abilities and available equipment to a greater degree." (Vocational Rehabilitation for Learning Disabled Adults., Zwerlein, Smith, Diffley, 1984). Based on follow-up studies conducted with almost 2,000 college students, the indication is as Lawrence said, "Give the disabled access to college and universities, and they will

match the non-disabled in their performance, progress, and promise" (Mangrum and Strichart, 1984).

Often the way to find out whether a student can successfully negotiate a program is for him to try it . . . The right to the chance to succeed implies the corresponding right to the chance to fail" (P. S. Jastram, 1979).

Data gathered from surveys of colleges and library research indicate that the primary alternative instructional materials and strategies used are:

I. Materials

A. Tape recorders

1. With assistance in best utilization (as a notetaking aid)
2. To use as a dictaphone to rehearse information and prepare for tests.

B. Tape recorded textbooks

1. Volunteers may assist in taping (a list may be obtained from Talking Books)
2. Part time employees could be hired to tape
3. Major sources of recorded books:

a. Recording for the Blind, Inc. (RFB)-(60,000 books recorded)
215 East 58th Street
New York, NY 10022 (212) 751-0860

b. National Library Service for the Blind and Physically Handicapped (NLS) (35,000 books recorded)
Library of Congress
1291 Taylor Street N. W.
Washington, DC 20542
(202) 287-5100

c. Special Equipment for the recordings (approximately $155)
American Printing House for the Blind
1839 Frankfurt Ave.
Louisville, KY 40206
(502) 895-2405

d. The College of the Ozarks
($4,000 books or tapes)

C. Calculators -- to be used by students with math learning disabilities. Students should be given special instruction to use the calculators effectively.

D. Typewriters -- to aid students with their writing. A program recommended by B. Cordoni is Typing Keys for the Remediation of Reading by Academic Therapy, 20 Commercial Blvd., Novato, CA 94947.

E. Computers with sound capabilities

1. Apple II GS -- This computer will probably be very useful within a few years, especially for dyslexic students. Presently there is very little software that has good sound capability. The available software is for young students. The market is open for programmers to develop good college-level software with sound capabilities. Currently the best on the market for the Apple II GS is Robotic sound and it is not very satisfactory. This can be used equally well with the Apple II E at much less cost.

The Apple II GS can be purchased directly from Apple for $1400 and the human voice produced is very realistic. A major software supplier that uses robotic sound is:

ACCESS Unlimited.
Speech Enterprises
9039 Katy Freeway
Suite 414
Houston, TX, 77024
(713) 461-0006
Sherry Lowry, Director

The students who tried the robotic sound found that it bothered them and they had difficulty in

under-standing it. This required intense concentration. The students who had an attention span deficit and a lack of patience had definite problems. The students felt that possibly if they were blind they might persevere more. An additional problem was that there was limited time to use the computer since only one Apple II GS was available. The students with the most severe reading problems asked to be contacted later in order to utilize the sound capabilities of the computer once the software has reached the same level as the hardware. The theory of a computer with sound capability still holds promise, but reality and practicality do not match the basic premise.

2. IBM -- This computer with sound is very good but again the software is limited and to give the system sound capabilities the price to a college is prohibitive at $4,000 plus the cost of the computer, itself. One way of reducing this cost somewhat is to buy a clone, such as Leading Edge.

F. Kurzweil Reader -- 185 Albany St., Cambridge, Mass 07139--A device used primarily for blind people. It actually translates words in print into sound. It could be very effective since it can read books not on tape. Some of its drawbacks are expense, difficulty to understand and use, availability, and problems of maintenance. It is available in many large libraries.

II. Alternative Strategies

A. Notetakers -- NCR paper could be used to assist students with reading, writing and

processing problems. These could be provided by paid notetakers or more practically by designated student volunteers who would be provided with NCR paper. The LD student should use several notetakers to obtain a better overall view of the class. If possible the LD student should meet with his notetakers to discuss the notes and their interpretation of the lecture.

B. Alternative test-taking procedures
   1. Readers and test proctors who allow extended time on tests and explain questions
   2. Tests given orally
   3. Spelling dictionaries or spelling handbooks are allowed
   4. Tests can be taped

C. Tutoring programs vary from volunteer to very structured.
   1. Some examples of tutoring programs
      a. Project Success -- University of Wisconsin -- Oshkosh used the Orton-Gillingham multisensory methods
      b. LAUNCH -- East Texas State University -- Commerce, Texas requires an hour of tutoring after every class hour
   2. Tutoring sessions should include
      a. Skills in listening
      b. Organizing notes
      c. Managing time
      d. Reading for main ideas
      e. Outlining
      f. Summarizing
      g. Memory techniques
      h. Test-taking strategies

ASSISTING HIGH SCHOOL STUDENTS

In order to assist a larger number of learning disabled students and help them to avoid new failures, both written and telephone surveys were conducted with high schools in the Houston area. The programs in the high schools vary greatly, but all expressed the opinion that once students complete high school, very little is done to assist the Houston area learning

disabled student. Consequently, many learning disabled students become under-employed or are unable to find any type of meaningful employment with a large number turning to a life of crime because of extreme frustration. The consensus of high school learning disabled coordinators and counselors with the Texas Rehabilitation Commission is that by helping these students at an early age would resolve many problems. By implementing a program of this type, a void in the community would be filled.

Pasadena area high schools have more than 800 learning disabled students enrolled. Three fourths of this number need special assistance to enable them to function in college or to obtain gainful employment. The high schools were very supportive and hoped that an ongoing program with special materials and alternative strategies would be established at San Jacinto College to assist the learning disabled, so that their education would not end with high school.

Research conducted with the high schools in the area indicated that the following steps could be implemented to help the learning disabled student to bridge the gap between high school and college:

1. Have a special day for a visit to college with sufficient guides to enable separation into small groups.pa
   a. Show recruitment and orientation films
   b. Offer a presentation for the learning disabled student with student speakers, a learning disabled specialist as a speaker, and an administration representative.
2. A college representative should visit the high schools and establish a person for learning disabled students to contact.
3. Give aptitude testing by college personnel in the high schools.

4. Offer pre-counseling to students while they are still in high school.
5. Provide information and assistance on all the services offered at the college.
6. Distribute financial aid forms and offer assistance in obtaining financial aid or grants.
7. Schedule a workshop for parents of learning disabled students to inform them of services available at the college and ways of overcoming the problems students could encounter.
8. Successful learning disabled college students could share their experiences and information with the high school students.

FACULTY / STAFF WORKSHOP

In order to better assist learning disabled students, a faculty/staff workshop was held. The workshop included lecture, discussion and handouts with the main point covered being how to discover the learning disabled student in the classroom, what a learning disability is, how faculty members can help the learning disabled and how Section 504 affects the college and these "special needs" students. The ten faculty members who attended the workshop on June 15 were interested in finding out more about the learning disabled students and requested a follow-up session. Another workshop has been scheduled for August 20. On August 18, the results of this grant will be shared with participants at a conference conducted by the Office of Education. Additional workshops have been scheduled by Texas Rehabilitation Commission and some area high schools. Some selected workshop handouts are in Appendix H.

MATERIALS SURVEY

In the process of researching alternative materials and strategies, numerous publishers and commercial suppliers were contracted. Some were contracted at conferences and others by mail or phone. Some of the materials received are fairly good but many were developed for younger children and were demeaning to older students. The interest level was boring and the concepts did not challenge the students. Based on the materials previewed there is a definite need for the development and availability of more college level material for the learning disabled student. Since using a sensory or tactile approach is very effective with the learning disabled media materials that are on the market are some of the most popular. Much computer software especially those that produce sound are in the developmental stage but show promise in working with the learning disabled. (The publishers of some software specifically for the Apple II GS are in appendix I.) A description of some of the software utilized is as follows:

Word Processing/Apple Works or PFS Write:

First and foremost, a good word processing program is a great asset to the learning disabled person. Often their handwriting is less than beautiful and sometimes absolutely non-readable. A computer printout looks so nice and is so readable; it makes the student feel confident in handing in their work. Also the word processor makes corrections on the work so much easier for the student. They do not need to type everything over again, just edit the mistakes.

Spelling Checking Programs:

Sensible Speller or Spell Checker: These programs highlight the suspect words and let the student know they may be misspelled. However, the students still needs to look them up and change them. This works better if they have a Bad Speller's Dictionary.

Typing Programs:

To enhance typing skills get a copy of a good typing program like Typing Keys to Computer Ease. This program was written originally for the typewriter to teach learning disabled students how to use a typewriter. The computer version is very good and contains a three part lesson called: warm-up, word drill, and review. In the word drill a word appears on the screen and then disappears and the student then types it. This program does not time the student or tell words per minute; everything is based on a percentage score.

Typing Tutor: presents drills on the keyboard as well as giving the student practice typing paragraphs and giving a words per minute and accuracy score. This program combined with Typing Keys, can really improve a student's typing ability and familiarity with the keyboard.

Vocabulary Programs:

Wizard of Words: a disk that has several good vocabulary/word games on it that are motivating and fun to play and can increase spelling and vocabulary skills.

Game Show: much like Password, the student picks a category and then a clue is given and the student

must type in the correct word, spelled correctly. There are many categories on the disk and extra disks can be purchased with more categories.

Spelling Programs:

MECC Speller 1: most of all the MECC (Minnesota Educational Computer Consortium) disks are very good. This disk allows one to input the student's spelling words and set the time that they stay on the screen.

Crossword Magic/Maker: allows one to make crossword puzzles with ease; you need a printer.

Print Shop: a wonderful program to make cards, signs, banner, letterhead. Students can enhance any book report or project by designing their own cover in a matter of minutes; very user friendly.

Math Programs:

Eduware Algebra: four disks that go from the basics to very sophisticated algebra.

Test Preparation:

ACT and SAT Review: these programs allow the student to get an idea of what these tests are like. The time taken by the student to answer is given and the student receives an explanation of why the specified answer was correct.

Writing Skills Programs:

MECC: How to Write a Narrative, How to Write a Character Sketch: gives the student an introduction to both these skills and lets them practice; it is helpful to have a printer.

Additional information on computers and how they can be

used with the learning disabled is listed below with the name and address of the publisher:

Bowe, Frank --

Personal Computers and Special Needs. Describes hundreds of add-ons that let computers "hear" and "talk". Each product listing features manufacturer's name, address and current price.

Budoff, Milton, Joan Thormann and Ann Gras --

Microcomputers in Special Education: An Introduction to Instructional Applications: this book introduces the special education teacher and administrator to the elements of microcomputer systems and they focus on how microcomputers can be used in special education.

Gergen, Michael --

Computer Technology For The Handicapped -- Applications '85: Selected Proceedings of the 1985 Closing The Gap Conference. This is a collection of papers on the planning, selection and implementation of microcomputer technology for handicapped and disabled persons, for use by professionals, handicapped individuals, their families and associates. Divided into three categories: planning, selection and implementation.

Mc Williams, Peter A. --

Personal Computers and the Disabled: In a straightforward, light manner, the author details what the personal computer can do for the disabled--that it can make the difference between communication isolation, between productivity and non-productivity between independence and dependence.

This material is available from : Closing The Gap, P.O. Box 68, Henderson, MN 56044.

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APPENDICES

A. Chart of services offered by responding colleges

B. Brochure

C. Selected organizations and resources

D. Check lists on learning disabled students

E. Newspaper article

F. Learning style preference forms

G. Guidelines for college survival skills

H. Handouts compiled for workshop

I. Publishers of Apple II GS Software

CHART OF SERVICES OFFERED

Colleges contacted	500
Colleges that responded	139

SERVICES	COLLEGES	*PERCENTAGE
Tutoring	125	90%
Readers	25	18%
Test Adaptions	105	76%
Counseling	21	15%
Taped Texts	75	54%
Notetakers	75	54%
Voice Activated Computers	15	11%
Reading Machines	10	7%
Computer/Lab Centers	100	72%
Pre-Registration Assistance	50	36%

*Percentage based on colleges response to questionnaires

Note: Most colleges that responsed had already began to implement their curriculum and were very interested in the results of this project.

SUGGESTIONS FOR HELPING ALL STUDENTS TO SUCCEED IN THE CLASSROOM

1. Provide students with a detailed course syllabus. Make it available before registration.
2. Clearly spell out expectations before course begins (e.g., grading, material to be covered, due dates).
3. Start each lecture with an outline of material to be covered that period. At the conclusion of class, briefly summarize key points.
4. Speak directly to students, and use gestures and natural expressions to convey further meaning.
5. Present new or technical vocabulary on the blackboard or use a student handout. Terms should be used in context to convey greater meaning.
6. Give assignments both orally and in written form to avoid confusion.
7. Announce reading assignments well in advance for students who are using taped materials. It takes an average of six weeks to get a book tape recorded.
8. Facilitate use of tape recorders for note-taking by allowing students to tape lectures.
9. Provide study questions for exams that demonstrate the format, as well as the content, of the test. Explain what constitutes a good answer and why.
10. If necessary, allow LD students to demonstrate mastery of course material using alternative methods (e.g., extended time limits for testing, oral exams, taped exams, individually proctored exams in a separate room).
11. Permit use of simple calculators, scratch paper, and spellers' dictionaries during exams.
12. Provide adequate opportunities for questions and answers, including review sessions.
13. If possible, select a textbook with an accompanying study guide for optional student use.
14. Encourage students to use campus support services (e.g., pre-registration, assistance in ordering taped textbooks, alternative testing arrangements, specialized study aids, peer support groups, diagnostic consultation, study skills, academic tutorial assistance).

SERVICES OFFERED

- **Counseling**
- **Testing**
- **Tutoring**
- **Developmental Studies**
  for extra assistance with
  Study Skills
  Reading
  Writing
  Math
- **General information**
- **Referrals**
  to other agencies

For further information call: 476-1501, ext. 333, 339 Rm 103 Tech Bldg.

San Jacinto College Central

It is the policy of The San Jacinto College District not to discriminate on the basis of race, color, national origin, sex, age or handicapping condition.

LEARNING DISABILITIES

- **What they are**
- **What they aren't**
- **How to cope**

San Jacinto College Central

LEARNING DISABILITIES

What do Einstein, Da Vinci, Edison, Winston Churchill and Hans Christian Anderson have in common? If you answered 'learning disabilities,' go to the head of the class.

As the list above demonstrates, a disability in one or more areas of learning does not mean a person cannot excel. Most people with learning disabilities are of average or higher intelligence. They simply don't learn the way most people do. The problem may be in reading *(dyslexia)*, or math *(dyscalculia)*, or in handwriting *(dysgraphia)*, or it may be a more complex combination of several problems.

WHAT A LEARNING DISABILITY ISN'T:

A learning disability is not a form of mental retardation or an emotional disorder.

WHAT A LEARNING DISABILITY IS:

A learning disability is a permanent disorder which affects the manner in which individuals with normal or above average intelligence take in, retain and express information. Like interference on the radio or a fuzzy TV picture, incoming or outgoing information may become scrambled as it travels between the eye, ear, or skin and the brain.

While commonly recognized problems occur in reading comprehension, spelling, written expression, math computation, and problem solving, learning disabilities also can be responsible for problems in organizational skills, time management, and social skills. Many LD adults may also have language-based and/or perceptual problems. Learning disabilities can be especially frustrating because the problems they cause are not always consistent. Something may be a problem one day and not the next, or it may be a problem throughout grade school, disappear during high school, and then resurface again in college.

SOME COMMON CHARACTERISTICS OF LD COLLEGE STUDENTS

Reading Skills *(Dyslexia)*

1. Slow reading rate and/or difficulty in modifying reading rate in accordance with material difficulty.
2. Poor comprehension and retention.
3. Difficulty identifying important points and themes.
4. Poor mastery of phonics, confusion of similar words, difficulty integrating new vocabulary.

Written Language Skills *(Dysgraphia)*

1. Difficulty with sentence structure (e.g., incomplete sentences, run-ons, poor use of grammar, missing inflectional endings).
2. Frequent spelling errors (e.g., omissions, substitutions, transpositions), especially in specialized and foreign vocabulary.
3. Inability to copy correctly from a book or the blackboard.
4. Slow writer.
5. Poor penmanship (e.g., poorly-formed letters, incorrect use of capitalization, trouble with spacing, overly-large handwriting).

Oral Language Skills

1. Inability to concentrate on and comprehend oral language.
2. Difficulty in orally expressing ideas which he/she seems to understand.
3. Written expression is better than oral expression.
4. Difficulty speaking grammatically correct English.
5. Cannot tell a story in proper sequence.

Mathematical Skills *(Dyscalculia)*

1. Incomplete mastery of basic facts (e.g., mathematical tables).
2. Reverse numbers (e.g., mathematical tables).
3. Confuses operational symbols, especially + and ×.
4. Copies problems incorrectly from one line to another.
5. Difficulty recalling the sequence of operational processes.
6. Inability to understand and retain abstract concepts.
7. Difficulty comprehending word problems.
8. Reasoning deficits.

Organizational and Study Skills

1. Time management difficulties.
2. Slow to start and complete tasks.
3. Repeated inability, on a day-to-day basis, to recall what has been taught.
4. Difficulty following oral and written directions.
5. Lack of overall organization in written notes and compositions.
6. Demonstrates short attention span during lectures.
7. Inefficient use of library reference materials.

Social Skills

Some LD adults may have social skills problems due to their inconsistent perceptual abilities. For the same reason that a person with visual perceptual problems may have trouble discriminating between the letters "b" and "d", he/she may be unable to detect the difference between a joking wink and a disgusted glance. People with auditory perceptual problems might not notice the difference between sincere and sarcastic comments, or be able to recognize other subtle changes in tone of voice. These difficulties in interpreting non-verbal messages may result in lowered self-esteem for some LD adults, and may cause them to have trouble meeting people, working cooperatively with others, and making friends.

SUGGESTIONS FOR COLLEGE STUDENTS WITH LEARNING DISABILITIES

1. If you know you have an identified learning disability, talk to your instructors before the semester begins.
2. If you think you have an unidentified learning disability, call the campus Learning Disabled Project at 476-1501, ext. 333 or 339, or the Developmental Studies office at 476-1501, ext. 478.
3. Set realistic goals and priorities for course work.
4. Keep only one calendar with all relevant dates, assignments, and appointments.
5. Use a tape recorder during lectures.
6. Listen to the tape as soon after class as possible to refresh your memory, then, reorganize your notes.
7. Make notes of any questions you might have so that they can be answered before the next exam.
8. Sit toward the front of the classroom to maximize your eye contact and to reduce distractions.
9. Estimate how long a given class assignment will take, generally planning on two hours outside of class for every hour in class. Build in study breaks, as fatigue is a big time waster.
10. If you are having trouble, seek campus support help early in the semester by calling either the Learning Disabled Project or the Developmental Studies office.

Agencies Contacted

Alabama ACLD, P.O. Box 11588, Montgomery, AL 36111

Arkansas ACLD, Box 7316, Little Rock, AK 72217

Illinois ACLD, P.O. Box A-3239, Chicago, IL 60690

Kansas ACLD, P.O. Box 4424, Topeka, KS 66604

New Hampshire ACLD, P.O. Box 3377, Manchester, NH 03103

Arizona ACLD, P.O. Box 15525, Phoenix, AZ 85060

Mississippi ACLD, P.O. Box 9387, Jackson, MS 39206

New Jersey ACLD, P.O. Box 249, Convent Station, NJ 07961

Vermont ACLD, 9 Heaton Street, Montpelier, VT 05602

Association on Handicapped Student Services, P.O. Box 886, Ames, IA 50010

CEC, 1920 Association Drive, Reston, VA 22091

Department of Special Education, University of Louisville, Louisville, KY 40292

Foundation for Children, 99 Park Avenue, New York, NY 10016

Friends of the Sensorially Deprived, P.O. Box 186, Belmont, MA 02178

Georgia Organization for Adults, 475 Burgandy Court, Stone Mountain, GA 30087

Information Center, 20 Park Plaza-Room 330, Boston, MA 02116

Department of Special Education, East Texas State University, Commerce, TX 75428

National Easter Society, 2023 W. Ogden Avenue, Chicago, IL 60612

National Information Center, P.O. Box 1492, Washington, DC 20013

National Network of Learning Disabled Adults, P.O. Box 3130, Richardson, TX 75080

New York Association for the Learning Disabled, 217 Lark Street, Albany, NY 12210

Orton Dyslexic Society, 724 York Road, Baltimore, MD 21204

Parent Information Center, P.O. Box 1422, Concord, NH 03301

"Perceptions, Inc.", P.O. Box 142, Milburn, NJ 07041

President's Committee on Employment of Handicapped, 1111 20th St. NW--Room 600, Washington, DC

The Puzzle People, 122 Belvedere Drive, Mill Valley, CA 94941

DATE:

NAME OF SCHOOL OR ORGANIZATION:

NAME OF CONTACT:
Title

ADDRESS:

PHONE:

TYPE OF SCHOOL:

ENROLLMENT:
Special courses:
Are students mainstreamed into college life?

IDENTIFICATION PROCEDURE FOR LD STUDENTS:
Diagnostic tests

PROCEDURES FOR MANAGING AN LD STUDENT'S SCHOOLING:

(a) Tutoring techniques

(b) Remediation

(c) Instructional strategies
Are there alternative ways to take examinations?

(d) Special courses
Is substitution for required courses permitted?
Is a reduced course load an option?

(e) Counseling
Individual
Group

(f) Textbooks
Notetakers
Taped textbooks, etc.

(g) Other printed materials

(h) Computer assisted instruction

RESEARCH PROCEDURES:

REFERRALS:

CHECKLIST FOR DEFINING LEARNING DISABILITIES

This checklist may guide you in determing eligibility if enough background information is available, or in requesting a psychological, neurological, or educational evaluation if information seems lacking.

1. Evidence of above average, average or near average intelligence (usually 85 I.Q. or more) _____
2. Absence of other primary handicaps that may be causing the learning disability. _____
3. A discrepancy between intellectual potential and actual achievement. _____
4. Behavioral manifestations of the learning disability (attention disorder, disorientation in time, high distractibility, disorganization, poor self-image, memory deficits, communication difficulties). _____
5. Evidence of poor performance when the learning modality in question is required for processing information. _____
6. Evidence of "scatter" in scores on psychological measures of learning strengths and learning weaknesses (i.e., difference in verbal and performance subtests or difference among subtests in verbal area or performance area). _____
7. Evidence in school history and work history that an individual has experienced the learning difficulties over time (i.e., that the current deficits are neither situational nor of recent onset). _____
8. Vocational evaluations or observations indicating difficulty with:
   A. Beginning, sustaining and completing tasks. _____
   B. Interacting successfully with superiors and peers. _____
   C. Following directions, receiving information, processing it, expressing or understanding it. _____
   D. Orientation to space, direction and time. _____
   E. Adjustment to work routine. _____
   F. Inconsistencies in performing tasks requiring similar abilities or inconsistencies in performing steps of a whole task. _____

CHECKLIST ON L. D. STUDENTS
(COLDS)

A learning disabled person may exhibit several or many of the following behaviors:

___ Demonstrates marked difficulty in reading, writing, spelling, and /or using numerical concepts in contrast with average to superior skills in other areas, (usually 85 I.Q. or more).

___ Has poor formed handwriting--may print instead of using script; write with inconsistent slant; have difficulty with certain letters; space words unevenly.

___ Has trouble listening to a lecture and taking notes at the same time.

___ Is easily distracted by background noise or visual stimulation; unable to pay attention; may appear to be hurried and anxious in one-to-one meetings.

___ Has trouble understanding or following directions; is easily overwhelmed by a multiplicity of directions or over-stimulation; may not understand information the first time it is given and may need to have it repeated.

___ Confuses similar letters such as "b" and "d", or "p" and "q"; confuses the order of letters in words repeating "was" for "saw", teh" for "the"; may misspell the same word several different ways in the same composition.

___ Omits or adds word, particularly when reading aloud.

___ Confuses similar members such as 3 and 8, or 6 and 9, or changes the sequence of members such as 14 and 41; has difficulty copying numbers accurately and working with numbers in columns.

___ Exhibits an inability to stick to simple schedules; repeatedly forgets things; loses or leaves possessions; and generally seems "particularly disorganized."

___ Appears clumsy or poorly coordinated.

___ Seems disorganized in space--confuses up and down, right and left; gets lost in buildings; is disoriented when familiar environment is rearranged.

___ Seems disoriented in time, i.e. is often late to class, unusually early for appointments, or unable to finish assignments in the standard time period.

___ Misinterprets the subtleties in language, tone of voice or social situations.

___ Has a history of work/school problems related to learning disabilities.

LEARNING DISABLED PROSPECTIVE STUDENTS

Name _____ Age _____

Address _____

City _____ State _____ Zip _____

Parent/Contact _____ Phone No. _____

Home Phone _____ Business Phone _____

Type of LD: Dyslexia _____ Dyscalculia _____ Dysgraphia _____

Other _____

_____

Academic History

Preschool _____

Elementary _____

Jr. High _____

High School _____

College _____

Previous Testing

Date _____

Place _____

Type of Testing _____

Referred to TRC for testing Yes ____ No ____

Remarks: _____

_____

_____

_____

_____

(Sample of questionnaire filled out on each prospective student)

Bay Area

San Jac pilot program to help learning disabled

DEER PARK — What do Einstein, Da Vinci, Edison, Winston Churchill and Hans Christian Anderson have in common? If you answered 'learning disabilities,' go to the head of the class. You may not, however, find any of those brilliant and talented people there with you.

As the list above demonstrates, a disability in one or more areas of learning does not mean a person cannot excel. Most people with learning disabilities are of average or higher intelligence. They simply don't learn the way most people do. The problem may be in reading, dyslexia, or mat, dyscalculia, or in handwriting, disgraphia, or it may be a more complex combination of several problems.

San Jacinto College Central is looking for people with learning disabilities to join a pilot program designed to develop new ways of learning. Program participants will have an opportunity to work with highly qualified, trained personnel at the college as the study seeks to find ways to help people with normal intelligence find the path to reading, writing and mathematics.

San Jacinto College Central learning disabled coordinator Sharon Freeman is looking for people to participate in the program. There will be no charge to those selected. "We are excited about the possibilities of this program," Freeman said. "There are so many new developments in learning that people who have been out of school for a while may never have had the opportunity to use. Plus, this program will give us the opportunity to explore entirely new learning methods."

People of normal intelligence who have been diagnosed as learning disabled are invited to call 476-1501, ext. 333 or 339, to inquire about participating in the pilot study. In addition, people who think they have a problem, but have not been diagnosed, may call to see if they qualify. Those who may qualify, but have not yet been diagnosed, will be tested and counseled free by the Texas Rehabilitation Commission.

Freeman would like to hear from anyone who thinks he/she may qualify for the pilot program. Call 476-1501, ext. 333 or 339 for further information.

TACTILE LEARNERS

Learning must involve the sense of touch.-

Often take notes and like to write on the blackboard.

Like to do artwork.

Like to piece things together.

Are often found doodling.

Like to trace words and pictures.

Are often seen "fiddling" with something.

Tasks that require manipulation of something are successful with tactile learners, such as use of Cuisinaire rods, TPR, Bingo, etc.

KINESTHETIC LEARNERS

Learn by doing; direct involvement.

Often fidget and find reasons to move.

Are not as attentive to visual or auditory presentations; want to be doing something.

Try things out; touch, manipulate objects.

Gesture when speaking.

Are often poor listeners.

Respond to music by physical movement.

Total Physical Response activities are usuall successful with kinesthetic learners.

VISUAL LEARNERS

Learn by seeing and by watching demonstrations.

Conjure up the image of a form by seeing it in their "mind's eye".

Often have vivid imaginations.

Often stare; they need something to watch.

Are often quiet and don't talk at length.

Become impatient or drift away when extensive listening is required.

Prefer the visual arts and media.

Learning reading through word recognition is useful to visual learners.

AUDITORY LEARNERS

Are excellent listeners.

Can reproduce symbols, letters or words by' hearing them.

Enjoy dialogues, plays, dramas, dictations.

Often hum or talk to selves and others.

Favor music; can learn concepts by listening to tapes.

Can repeat or fulfill verbal instructions.

Learning reading through a phonics approach is useful to auditory learners.

Prepared by: Mindy Roth, Oregon State University, 1985

FIELD DEPENDENT LEARNERS	FIELD INDEPENDENT LEARNERS
See the whole picture; the forest rather than the trees.	Can distinguish parts from the whole; the trees rather than the forest.
May be easily distracted by goings-on around them	Are not disturbed by the things going on around them.
Tend to be chatty, social and empathetic.	Tend to be analytical and precise.
Prefer unstructured situations and choices.	Prefer structured situations and schedules, syllabis, agendas, et
Like to learn and study with others.	Like to learn and study independently.
Like discussions and idea sharing.	Like to know performance criteria.
Agrarian societies tend to produce more field dependent learners than industrial societies do.	Industrial societies tend to produce more field independent learners than agrarian societies do.

Prepared by: Mindy Roth, Oregon State University, 1985

LEARNING CHANNEL PREFERENCE

3--Often Applies 2--Sometimes Applies 1--Never Applies

Preferred Channel: VISUAL

___ 1. I enjoy doodling and even my notes have lots of pictures, arrows, etc. in them.
___ 2. I remember something better if I write it down.
___ 3. I get lost or am late if someone TELLS me how to a get to a new place and I didn't write down the directions
___ 4. When trying to remember someone's telephone number, or something new like that, it helps me to get a picture of it in my head.
___ 5. I am taking a test, I can "see" the textbook page and where the answer is.
___ 6. It helps me to LOOK at the person when listening. It keeps me focused.
___ 7. I had a speech therapy.
___ 8. It's hard for me to understand a joke when someone tells me.
___ 9. It's hard for me to understand what a person is saying when there are people talking or music is playing.
___10. It is better for me to get work done in a quiet place.

Visual Total:____

Preferred Channel: AUDITORY

___ 1. My written work doesn't look neat to me. My papers have crossed-out words and erasures.
___ 2. It helps to use my finger as a pointer when reading to keep my place.
___ 3. Papers with very small print or blotchy dittos or poor copies are tough on me.
___ 4. I understand how to do something if someone tells me rather than having to read the same thing to myself.
___ 5. I remember things that I hear, rather than things that I see or read.
___ 6. Writing is tiring. I press down too hard with my pen or pencil.
___ 7. My eyes get tired. I press down too hard with my pen or pencil.
___ 8. When I read, I mix up words that look alike, such as "them" and "then", and "bad" and "dad".
___ 9. It's hard for me to read other people's handwriting.
___10. If I had the choice to learn new information via a lecture or a textbook, I would choose to hear it rather than read it.

Auditory Total:____

Preferred Channel: HAPTIC

___ 1. I don't like to read directions; I'd rather just start doing.

___ 2. I learn best when I am shown how to do something and I have the opportunity to do it.

___ 3. Studying at a desk is not for me.

___ 4. I tend to solve problems through a more trial-and-error approach, rather than from a step-by-step method.

___ 5. Before I follow directions, it helps me to see someone else do it first.

___ 6. I find myself needing frequent breaks while studying.

___ 7. I am not skilled in giving verbal explanations or directions.

___ 8. I do not become easily lost, even in strange surroundings.

___ 9. I think better when I have the freedom to move around.

___10. When I can't think of a specific word, I'll use my hands a lot and call something a "what-cha-ma-call-it" or a "thing-a-ma-jig."

Haptic Total:____

COLLEGE SURVIVAL SKILLS FOR THE STUDENT WITH LEARNING DISABILITY

1. Understand your problem areas and be prepared to discuss them when the situation demands it.
2. Your commitment to college must be deep and genuine. It must be a high priority in your life.
3. Start early to seek career counseling so that your choice will be compatible with your strengths and you will be able to plan strategies to meet long range goals.
4. Use the available services at the university to help you with problens.
5. Use your family as a support system (i.e. readers, typists, resources).
6. Approach instructors before classes begin to find out what types of exams are given, how many papers are required, are there options as to types of exams. Ask for the grading criteria and whether a lab assistant is available for extra help.
7. Plan to take fewer classes each semester (9 to 12 units) and balance types of classes (amount of reading, writing, etc.). Be aware that it will probably take five years to complete a degree. Take at least one class for relaxation, something you will enjoy.
8. Attend every class. Ask questions. Sit in the front row.
9. Organize your time, allowing extra study time.
10. Take the "Study Skills"(DEVS 1305) class.
11. Start writing assignments early. Ask the professor for assignments early in the semester. Learn word processing on the computer.
12. Be prepared for lack of awareness about LD and even disbelief be professor and other students.
13. Have a written summary of your diagnosis. This must be on file for verification when accommodation is needed.
14. Because it may take you longer to complete assignments and exams, you may receive lower grades that other students when you feel that you know more than they do. This may be true, but it is a fact you may have to face.
15. Use the Developmental Lab and consider Developmental Studies courses in Reading, Writing and Math, based on test results.

CELEBRITY QUIZ

Read the following vignettes and match each to the personalities listed below:

1. Albert Einstein	5. Tom Cruise	9. The Fonz
2. Winston Churchill	6. George Patton	10. Nelson Rockefeller
3. F. W. Woolworth	7. Bruce Jenner	11. Woodrow Wilson
4. Thomas Edison	8. Walt Disney	12. Hans Christian Anderson

As a lad of nine he did not know the letters of the alphabet. He finally learned to read at age 11. He was thought to be dull and backward. He entered Davidson College but withdrew because of illness. Later he went to Princeton, but his grades were mediocre. Yet, he eventually became _____president.

His head was very large at birth. His mother did not agree with those who said the child was abnormal. He was sent to school, but thought by the teacher to be mentally ill. The mother withdrew the child from school and taught him herself. She must have done a decent job, because _____he went on to create the electric light bulb and phonograph.

As a child he was labeled as slow. He clerked in a village grocery store. He suggested putting slow-moving merchandise on a counter and selling it for five cents. This venture was so successful that it was continued with new goods. He became the principal founder of a chain of _____five-and-ten-cent stores.

When he was 12 years old, he could not read, and he remained deficient in reading all his life. However, he could memorize entire lectures--which was how he got through school. He became a famous general during World _____War II.

Another child that was slow in school work and did not have a successful _____school experience later became a well-known producer and cartoonist.

This noted Englishman had much difficulty in school. He later became a _____national leader and an English Prime Minister.

This young boy had much difficulty reading and throughout his life was unable to read well. However, he was the Governor of the state of New York for four terms and later won Congressional approval to be appointed _____Vice President of the United States.

This boy had difficulty reading but was able to write some of the world's _____best-loved stories.

He was a social misfit. He dropped out of school for he was known to be _____a slow learner. However, he could make a car engine sing.

This boy could not talk until age four. He did not learn to read until he was nine. His teachers considered him to be mentally slow, unsociable, and a dreamer. He failed the entrance examinations to college, but finally passed them after an additional year of preparation. He lost three teaching positions. He became a patent clerk. Ultimately, _____he developed the theory of relativity.

He was the last American Decathalon winner in the 1976 Olympics. He had
_____difficulty with reading and other school subjects.

He is a famous movie star. He learns by listening to a tape. His current
_____movie is "Risky Business." He suffers from dyslexia.

SELF-EVALUATION

Please indicate the degreeto which you would be comfortable with situations and/or activities listed below by choosing a number from 1 to 5.

5= very comfortable 1=very UNcomfortable

1) Giving a speech to an audience of 100 professionals ____
2) Reading a textbook containing highly technical vocabulary ____
3) Teaching mathematics to a class of second graders ___
4) Repairing a radio or television set ___
5) Running a marathon ___
6) Organizing a fund raising campaign ___
7) Painting a landscape ___
8) Managing household budget ___
9) Filing income tax ___
10) Haggling with an used car salesman ___
11) Playing Trivial Pursuit ___
12) Handling telephone complaints ___
13) Driving a bus ___
14) Giving directions ___
15) Presenting yourself on a job interview ___
16) Writing a research paper ___
17) Changing a tire
18) Writing a poem ___
19) Giving negative feedback to a fellow employee ___
20) Reading a map ___

LEARNING DISABILITY

When does a learning problem become a disability?

1. When the problem is different enough so that a lot of people notice it.
2. When basic life tasks are made difficult.
3. When extra assistance is needed to function.

Educator's Definition - a specific learning disability is a disorder in one or more psychological processes involved in understanding or in using spoken or written language, manifested in disorders of listening, thinking, reading, wirting, spelling, talking, or arithmetic.

Becky's Definition - a specific learning disability involves difficulty taking information in through the senses (visual, auditory, tactile/kinesthetic) and interpreting it.

Main types of learning disabilities:

1. AUDITORY PERCEPTUAL PROBLEM - difficulty taking information in through the sense of hearing and/or processing that information.
   - A. auditory discrimination problem - difficulty telling the difference between similar sounds
   - B. auditory figure-ground problem - difficulty hearning a sound over background noise
   - C. auditory sequencing problem - trouble hearing sounds in the correct order
2. VISUAL PERCEPTUAL PROBLEM - difficulty taking information in through the sense of signt and/or processing that information.
   - A. visual discrimination problem - difficulty seeing the difference between two similar objects
   - B. visual figure-ground problem - difficulty seeing a specific image within a competing background
   - C. visual sequencing problem - difficulty seeing things in a correct order

LEARNING PROBLEMS WHICH ARE NOT LEARNING DISABILITIES

PROBLEMS	TREATMENT*
1. underprepared	individualized instruction counseling intense remediation
2. learned helplessness	supportive academic environment show a relationship between effort and results intense counseling
3. cumulative deficit	intensive remediation in reading and writing individualized tutoring or learning center activity
4. poor self-concept	arrange environment to insure success be supportive
5. negative attitude toward education	change circumstances/situations which caused the problem

* Give student control over his/her own destiny.

PROMINENT DYSLEXICS

Dr. Thompson, Professor of Psychiatry, University of North Carolina, on Prominent Dyslexics:

1. Thomas Edison
2. Harvey Cushing
3. A. Rodin--His father said, "I have an idiot for a son". At 67, he received an honarary degree from Oxford. (Notice "The Thinker"--how contorted his position appears. Rodin had mixed dominance).
4. George S. Patton IV--kept home and was read to. His excellent memory got him through West Point.
5. Woodrow Wilson--learned to read when he was 11.
6. Einstein--considered backward by his teachers.
7. Lowell, the poet, said: "Spelling is the invention of the Devil".
8. William James, poor visualizer, said: "I must trace the letter in my mind or I can't recall it".
9. Hans Christian Anderson
10. Leonardo da Vinci
11. Governor Rockefeller said: "As a boy I saw all the words backwards, and today I can't spell".
12. General Westmoreland
13. The writer, Fitzgerald
14. The Beatle, John Lennon
15. John F. Kennedy--at age 12 he was still a slow reader
16. Robert Kennedy--a poor student, cramped writing, dyslexia in speech persisted
17. John Kennedy, Jr.--tranferred to Collegiate instead of repeating the second grade
18. Prince Charles
19. Eisenhower
20. Churchill--a borderline dyslexic
21. Wrigley, rich, became a recluse, couldn't express himself
22. Moses--speech defects
23. Demosthenes--speech defects

AN EXPERIENCE IN MBD/SLD
AND HOW IS YOUR VISUAL PERCEPTION?

PLEASE DECODE THE FOLLOWING:

E ach ch ilb mitha le ar mimp bisadility is am iubiuibnal, het someg ene ral charact:eristic s bo exist:

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NOM let,s biscus s sowe of yonr "bercegtual brodlews."

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2. Li st sowe oft he tying s yon bib th at enadeied yon to reab tyis gaper.

Wyat mere so we of you r jeelings or tho ug ts myile a ttemgtimg for ea b tyis?

In addition, a printed chart of these products will be included in the April 15th AppleGram mailing.

Apple IIGS Software & Peripheral Availability List as of 3/16/87.

SOFTWARE:

WORD PROCESSING:

WordPerfect	WordPerfect	(801) 225-5000
GraphicWriter	DataPak Software, Inc.	(818) 905-6419
MultiScribe GS	Styleware	(713) 668-1360

DATABASE:

SoftWood GS File	SoftWood	(602) 893-1407

SPREADSHEET:

VIP Professional	ISD Marketing	(416) 479-1880

BUSINESS GRAPHICS:

Visualizer	PBI Software, Inc.	(415) 349-8765

COMMUNICATION:

CommWorks	PBI Software, Inc.	(415) 349-8765
MouseTalk	United Software, Inc.	(818) 887-5800

MUSIC COMPOSITION:

Music Construction Set	Electronic Arts	(415) 572-2787
Music Studio	Activision, Inc.	(800) 227-9759

PAINT:

Paintworks Plus	Activision, Inc.	(800) 227-9759
TopDraw	Styleware, Inc.	(713) 668-1360
Deluxe Paint II	Electronic Arts	(415) 572-2787
816/Paint	Baudville	(616) 957-3036

ENTERTAINMENT:

Tass Times in Tone Town	Activision, Inc.	(800) 227-9759
Shanghai	Activision, Inc.	(800) 227-9759

Hacker II	Activision, Inc.	(800) 227-9759
EDUCATION:		
KidsTime II	Great Wave Software, Inc.	(408) 438-1990
PERIPHERAL CARDS		
SuperSonic Stereo Card	MDIdeas, Inc.	(415) 573-0580
SuperSonic Digitizer	MDIdeas, Inc.	(415) 573-0580
OctoRam Memory Card	MDIdeas, Inc.	(415) 573-0580
ProGrappler	Orange Micro, Inc.	(714) 779-2772
RamPak 4GS Memory Subsystem	Orange Micro, Inc.	(714) 779-2772
VisionPlus	AST Research, Inc.	(714) 553-0340
HARDWARE ACCESSORIES:		
Kurta Graphics Tablet	Kurta Corporation	(602) 276-5533
Conserver	MDIdeas, Inc.	(415) 573-0580